### FEDERAL OPERATING PERMIT

#### A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO

Rohm and Haas Texas Incorporated AUTHORIZING THE OPERATION OF

> Utilities Area Industrial Organic Chemicals LOCATED AT

> > Harris County, Texas

Latitude 29° 43' 39" Longitude 95° 6' 0"

Regulated Entity Number: RN100223205

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: _	<u> </u>	Issuance Da	ate:	
For the C	ommission			

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#### **General Terms and Conditions**

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

## Special Terms and Conditions: Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

- 1. Permit holder shall comply with the following requirements:
  - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
  - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

- C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
- D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
- E. Emission units subject to 40 CFR Part 63, Subpart DDDDD as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1130 which incorporates the 40 CFR Part 63 Subpart by reference.
- F. For the purpose of generating emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 1 (Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 101.302 (relating to General Provisions)
  - (ii) Title 30 TAC § 101.303 (relating to Emission Reduction Credit Generation Certification)
  - (iii) Title 30 TAC § 101.304 (relating to Mobile Emission Reduction Credit Generation and Certification)
  - (iv) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)
  - (v) Title 30 TAC § 101.309 (relating to Emission Credit Banking and Trading)
  - (vi) The terms and conditions by which the emission limits are established to generate the reduction credit are applicable requirements of this permit
- G. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 3 (Mass Emission Cap and Trade Program) Requirements:
  - (i) Title 30 TAC § 101.352 (relating to General Provisions)
  - (ii) Title 30 TAC § 101.353 (relating to Allocation of Allowances)
  - (iii) Title 30 TAC § 101.354 (relating to Allowance Deductions)

- (iv) Title 30 TAC § 101.356 (relating to Allowance Banking and Trading)
- (v) Title 30 TAC § 101.358 (relating to Emission Monitoring and Compliance Demonstration)
- (vi) Title 30 TAC § 101.359 (relating to Reporting)
- (vii) Title 30 TAC § 101.360 (relating to Level of Activity Certification)
- (viii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit
- H. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 101.372 (relating to General Provisions)
  - (ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)
  - (iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)
  - (iv) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)
  - (v) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)
  - (vi) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit
- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
  - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
  - B. Title 30 TAC § 101.3 (relating to Circumvention)
  - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

- D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
- E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
- F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
- G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
- H. Title 30 TAC § 101.221 (relating to Operational Requirements)
- I. Title 30 TAC § 101.222 (relating to Demonstrations)
- J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
- 3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
  - A. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
  - B. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
    - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
    - (ii) Sources with an effective stack height ( $h_e$ ) less than the standard effective stack height ( $H_e$ ), must reduce the allowable emission level by multiplying it by  $[h_e/H_e]^2$  as required in 30 TAC § 111.151(b)
    - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
  - C. Permit holder shall comply with the following requirements for steam generators:
    - (i) Emissions from any oil or gas fuel-fired steam generator with a heat input capacity greater than 2,500 MMBtu per hour may not exceed 0.1 pound of TSP per MMBtu of heat input, averaged over a

two-hour period, as required in 30 TAC § 111.153(c) (relating to Emissions Limits for Steam Generators).

- 4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
  - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
  - B. Title 40 CFR § 60.8 (relating to Performance Tests)
  - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
  - D. Title 40 CFR § 60.12 (relating to Circumvention)
  - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
  - F. Title 40 CFR § 60.14 (relating to Modification)
  - G. Title 40 CFR § 60.15 (relating to Reconstruction)
  - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 5. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
- 6. For site remediation projects subject to 40 CFR Part 63, Subpart GGGGG that are completed within 30 consecutive calendar days the permit holder shall comply with 40 CFR § 63.7884(b), (b)(1) (3) (Title 30 TAC, Subchapter C, § 113.1160 incorporated by reference).
- 7. For containers managing remediation materials subject to 40 CFR Part 63, Subpart GGGGG, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.1160 incorporated by reference):
  - A. Title 40 CFR § 63.922(b)(1) (3), (c), (d), (d)(1) (5), (e), (f), and (f)(1) (4) (relating to Standards Container Level 1 Controls)
  - B. Title 40 CFR § 63.923(b)(1) (3), (c), (d), (d)(1) (5), (e), (f), and (f)(1) (4) (relating to Standards Container Level 2 Controls)
  - C. Title 40 CFR § 63.925(a)(1) (8), and (b)(1) (3) (relating to Test Methods and Procedures)
  - D. Title 40 CFR § 63.926(a)(1) (3) (relating to Inspection and Monitoring Requirements)

- E. Title 40 CFR § 63.7901(b) and (b)(1), for initial demonstration of compliance
- F. Title 40 CFR § 63.7901(b)(2), for initial demonstration of compliance
- G. Title 40 CFR § 63.7901(c), (c)(1), and (c)(2), for initial demonstration of compliance
- H. Title 40 CFR § 63.7901(d), and (d)(1) (4), for initial demonstration of compliance
- I. Title 40 CFR § 63.7903(b) and (b)(1), for continuous demonstration of compliance
- J. Title 40 CFR § 63.7903(b)(2), (b)(2)(i), (b)(2)(ii), for continuous demonstration of compliance
- K. Title 40 CFR § 63.7903(c)(4), (c)(4)(i), and (c)(4)(ii), for continuous demonstration of compliance
- L. Title 40 CFR § 63.7903(d)(5), (d)(5)(i), and (d)(5)(ii), for continuous demonstration of compliance
- M. Title 40 CFR § 63.7952(c), for recordkeeping
- 8. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

## **Additional Monitoring Requirements**

9. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more

frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

#### **New Source Review Authorization Requirements**

- 10. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
  - A. Are incorporated by reference into this permit as applicable requirements
  - B. Shall be located with this operating permit
  - C. Are not eligible for a permit shield
- 11. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
- The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, material safety data sheets (MSDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144.
  - A. If applicable, monitoring of control device performance or general work practice standards shall be made in accordance with the TCEQ Periodic Monitoring Guidance document.
  - B. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

- 13. The permit holder shall comply with the following requirements for Air Quality Standard Permits:
  - A. Registration requirements listed in 30 TAC § 116.611, unless otherwise provided for in an Air Quality Standard Permit
  - B. General Conditions listed in 30 TAC § 116.615, unless otherwise provided for in an Air Quality Standard Permit
  - C. Applicable requirements of 30 TAC § 116.617 for Pollution Control Projects based on the information contained in the registration application.

### **Compliance Requirements**

- 14. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
- 15. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:
  - A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:
    - (i) For sources in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020:
      - (1) Title 30 TAC § 117.9020(2)(A), (C), and (D)
  - B. The permit holder shall comply with the Initial Control Plan unit listing requirement in 30 TAC § 117.350(c) and (c)(1).
  - C. The permit holder shall comply with the requirements of 30 TAC § 117.354 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.356 for Revision of Final Control Plan.
- 16. Use of Emission Credits to comply with applicable requirements:
  - A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115
    - (ii) Title 30 TAC Chapter 117

- (iii) Offsets for Title 30 TAC Chapter 116
- B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:
  - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)(2)
  - (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1
  - (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)(2)
  - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122
- 17. Use of Discrete Emission Credits to comply with the applicable requirements:
  - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115
    - (ii) Title 30 TAC Chapter 117
    - (iii) If applicable, offsets for Title 30 TAC Chapter 116
    - (iv) Temporarily exceed state NSR permit allowables
  - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
    - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
    - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
    - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

### **Risk Management Plan**

18. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

#### **Permit Location**

19. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

#### **Permit Shield (30 TAC § 122.148)**

20. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

### **Attachments**

**Applicable Requirements Summary** 

**Additional Monitoring Requirements** 

**Permit Shield** 

**New Source Review Authorization References** 

Unit Summary	13
<b>Applicable Requirements Summary</b>	

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

## **Unit Summary**

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
BH-2-3	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	R7300	30 TAC Chapter 117, Subchapter B	No changing attributes.
BH-2-3	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	63DDDDD	40 CFR Part 63, Subpart DDDDD	No changing attributes.
BH-2-4	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	R7300	30 TAC Chapter 117, Subchapter B	No changing attributes.
BH-2-4	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	60D-1	40 CFR Part 60, Subpart D	GAS OR LIQUID FUEL ONLY = Burns only gaseous or liquid fossil fuel (not residual oil) with potential SO <sub>2</sub> emissions rates of o.o6o lb/MMBtu or less, does not use post combustion technology to reduce of SO <sub>2</sub> or PM, and monitors SO <sub>2</sub> emissions by sampling or fuel receipts.
BH-2-4	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	60D-2	40 CFR Part 60, Subpart D	D-SERIES FUEL TYPE #2 = Nonfossil fuel., GAS OR LIQUID FUEL ONLY = Burns gaseous or liquid fossil fuel with potential SO <sub>2</sub> emissions rates greater than o.060 lb/MMBtu, or other fuels, or uses post combustion technology to reduce of SO <sub>2</sub> or PM, or does not monitor SO <sub>2</sub> emissions by sampling or fuel receipts.

## **Unit Summary**

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
BH-2-4	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	,	63DDDDD	40 CFR Part 63, Subpart DDDDD	No changing attributes.
BH-2-3	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	BH-2-3-P	30 TAC Chapter 111, Visible Emissions	No changing attributes.
BH-2-4	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	BH-2-4-P	30 TAC Chapter 111, Visible Emissions	No changing attributes.

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
ВН-2-3	EU	R7300	NOx	30 TAC Chapter 117, Subchapter B	\$ 117.310(d)(3) \$ 117.310(a) \$ 117.310(a)(1)(A) \$ 117.310(b) [G]\$ 117.310(e)(2) [G]\$ 117.310(e)(3) \$ 117.310(e)(4) \$ 117.340(f)(1) \$ 117.340(f)(1) \$ 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NOx emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1)	\$ 117.345(a) \$ 117.345(f) \$ 117.345(f)(1) [G]\$ 117.345(f)(2) \$ 117.345(f)(9) \$ 117.8100(a)(5)(C)	\$ 117.335(b) \$ 117.335(g) [G]\$ 117.345(b) [G]\$ 117.345(c) \$ 117.345(d) \$ 117.345(d) \$ 117.8010 [G]\$ 117.8010(1) \$ 117.8010(2)(A) \$ 117.8010(2)(B) \$ 117.8010(2)(C) \$ 117.8010(2)(D) [G]\$ 117.8010(3) \$ 117.8010(4) [G]\$ 117.8010(5) \$ 117.8010(6) [G]\$ 117.8010(7) [G]\$ 117.8010(8) \$ 117.8100(c)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BH-2-3	EU	R7300	со	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.310(c)(3) § 117.340(f)(1) § 117.8120	CO emissions must not exceed 400 ppmv at 3.0% O 2, dry basis.	[G]§ 117.335(a)(1) § 117.335(b) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f) § 117.335(f) § 117.335(f) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(b)(2) § 117.8100(a) § 117.8100(a) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(5) § 117.8100(a)(5) § 117.8100(a)(5) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8100(a)(6) § 117.8120(1) § 117.8120(1)(A)	\$ 117.345(a) \$ 117.345(f) \$ 117.345(f)(1) [G]\$ 117.345(f)(2) \$ 117.345(f)(8) \$ 117.345(f)(9) \$ 117.8100(a)(5)(C)	\$ 117.335(b) \$ 117.335(g) [G]\$ 117.345(b) [G]\$ 117.345(c) \$ 117.345(d) \$ 117.345(d)(2) \$ 117.345(d)(3) \$ 117.345(d)(4) \$ 117.345(d)(5) \$ 117.8010 [G]\$ 117.8010(1) \$ 117.8010(2)(A) \$ 117.8010(2)(B) [G]\$ 117.8010(3) \$ 117.8010(4) [G]\$ 117.8010(5) \$ 117.8010(6) [G]\$ 117.8010(7) [G]\$ 117.8010(7) [G]\$ 117.8010(8) \$ 117.8100(c)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BH-2-3	EU	63DDDDD	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	limitation, standard	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart DDDDD

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
ВН-2-4	EU	R7300	NOx	30 TAC Chapter 117, Subchapter B	\$ 117.310(d)(3) \$ 117.310(a) \$ 117.310(a)(1)(A) \$ 117.310(b) [G]\$ 117.310(e)(2) [G]\$ 117.310(e)(3) \$ 117.310(e)(4) \$ 117.340(f)(1) \$ 117.340(f)(1) \$ 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NOx emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1)	\$ 117.345(a) \$ 117.345(f) \$ 117.345(f)(1) [G]\$ 117.345(f)(2) \$ 117.345(f)(9) \$ 117.8100(a)(5)(C)	\$ 117.335(b) \$ 117.335(g) [G]\$ 117.345(b) [G]\$ 117.345(c) \$ 117.345(d) \$ 117.345(d) \$ 117.8010 [G]\$ 117.8010(1) \$ 117.8010(2)(A) \$ 117.8010(2)(B) \$ 117.8010(2)(C) \$ 117.8010(2)(D) [G]\$ 117.8010(3) \$ 117.8010(4) [G]\$ 117.8010(5) \$ 117.8010(6) [G]\$ 117.8010(7) [G]\$ 117.8010(8) \$ 117.8100(c)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BH-2-4	EU	R7300	со	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.310(c)(3) § 117.340(f)(1) § 117.8120	CO emissions must not exceed 400 ppmv at 3.0% O 2, dry basis.	[G]§ 117.335(a)(1) § 117.335(b) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f) § 117.335(f) § 117.335(f) § 117.340(a) § 117.340(b)(1) § 117.340(b)(1) § 117.340(b)(2) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(1)(C) § 117.8100(a)(1)(C) § 117.8100(a)(5) § 117.8100(a)(5) § 117.8100(a)(5) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8100(a)(6) § 117.8100(a)(6) § 117.8120(1) § 117.8120(1)(A)	\$ 117.345(a) \$ 117.345(f) \$ 117.345(f)(1) [G]\$ 117.345(f)(2) \$ 117.345(f)(8) \$ 117.345(f)(9) \$ 117.8100(a)(5)(C)	\$ 117.335(b) \$ 117.335(g) [G]\$ 117.345(b) [G]\$ 117.345(c) \$ 117.345(d) \$ 117.345(d)(2) \$ 117.345(d)(3) \$ 117.345(d)(4) \$ 117.345(d)(5) \$ 117.8010 [G]\$ 117.8010(1) \$ 117.8010(2)(A) \$ 117.8010(2)(B) [G]\$ 117.8010(3) \$ 117.8010(4) [G]\$ 117.8010(5) \$ 117.8010(6) [G]\$ 117.8010(7) [G]\$ 117.8010(7) [G]\$ 117.8010(8) \$ 117.8100(c)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BH-2-4	EU	R7300	NH <sub>3</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(2) § 117.310(c)(2)(B) § 117.340(f)(1)	the exhaust stream for	\$ 117.335(a)(2) \$ 117.335(a)(4) \$ 117.335(b) \$ 117.335(c) \$ 117.335(d) \$ 117.335(g) \$ 117.340(d) [G]\$ 117.340(g) \$ 117.8100(a) \$ 117.8100(a)(1) \$ 117.8100(a)(1)(B) \$ 117.8100(a)(1)(B) \$ 117.8100(a)(1)(B) \$ 117.8100(a)(1)(C) \$ 117.8100(a)(1)(C) \$ 117.8100(a)(2) [G]\$ 117.8100(a)(4) \$ 117.8100(a)(5) \$ 117.8100(a)(5) \$ 117.8100(a)(5) \$ 117.8100(a)(5) \$ 117.8100(a)(5)(B) [G]\$ 117.8100(a)(5)(B) [G]\$ 117.8100(a)(5)(B) [G]\$ 117.8100(a)(5)(B) [G]\$ 117.8100(a)(6)(B) [G]\$ 117.8100(a)(6)(B) [G]\$ 117.8100(a)(6)(B) [G]\$ 117.8100(a)(6)(B) [G]\$ 117.8100(a)(6)(B) [G]\$ 117.8100(a)(6)(B) [G]\$ 117.8100(a)(6)(B)	\$ 117.345(a) \$ 117.345(f) \$ 117.345(f)(11) [G]\$ 117.345(f)(2) \$ 117.345(f)(8) \$ 117.345(f)(9) \$ 117.8100(a)(5)(C)	\$ 117.335(b) \$ 117.335(g) [G]\$ 117.345(b) [G]\$ 117.345(c) \$ 117.345(d) \$ 117.345(d)(2) \$ 117.345(d)(2) \$ 117.345(d)(4) \$ 117.345(d)(5) \$ 117.8010 [G]\$ 117.8010(1) \$ 117.8010(2) \$ 117.8010(2)(A) \$ 117.8010(2)(B) [G]\$ 117.8010(3) \$ 117.8010(4) [G]\$ 117.8010(5) \$ 117.8010(6) [G]\$ 117.8010(7) [G]\$ 117.8010(8) \$ 117.8010(8)
ВН-2-4	EU	60D-1	PM (OPACITY)	40 CFR Part 60, Subpart D	§ 60.42(a)(2)	On/after the performance tests of §60.8, no affected facility shall emit gases exhibiting greater than 20% opacity except for one six-minute period per hour of not more than 27% opacity.	§ 60.45(b)(1) § 60.45(b)(7) [G]§ 60.45(b)(7)(i) [G]§ 60.45(b)(7)(ii) § 60.45(b)(7)(iii) § 60.45(h) [G]§ 60.45(h)(1) [G]§ 60.45(h)(2) § 60.46(a) § 60.46(b)(3)	§ 60.45(h) [G]§ 60.45(h)(1) [G]§ 60.45(h)(2)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BH-2-4	EU	60D-1	SO <sub>2</sub>	40 CFR Part 60, Subpart D	§ 60.40(a)	The affected facility burns fuel (such as only gaseous fuels) that has no specific SO <sub>2</sub> emission requirements.	§ 60.45(b)(1) § 60.45(b)(4)	None	None
BH-2-4	EU	60D-1	NOx	40 CFR Part 60, Subpart D	§ 60.44(a)(1)	On/after the §60.8 tests, no affected facility shall emit gases containing NOx, expressed as NO2, in excess of 86 ng/J heat input (0.2 lb/MMBtu) derived from gaseous fossil fuel.	\$ 60.45(b)(3) \$ 60.45(b)(4) \$ 60.46(a) \$ 60.46(b)(1) [G]\$ 60.46(b)(5) [G]\$ 60.46(d)(1) \$ 60.46(d)(5) \$ 60.46(d)(6) \$ 60.46(d)(7) ** See Periodic Monitoring Summary	None	None
BH-2-4	EU	60D-2	PM	40 CFR Part 60, Subpart D	§ 60.42(a)(1)	On/after the §60.8 tests, no affected facility shall emit gases containing particulate matter in excess of 43 ng/J heat input (0.10 lb/MMBtu) derived from fossil fuel or fossil fuel and wood residue.	\$ 60.46(a) \$ 60.46(b)(1) [G]\$ 60.46(b)(2) [G]\$ 60.46(d)(1) \$ 60.46(d)(2) [G]\$ 60.46(d)(3) \$ 60.46(d)(6) \$ 60.46(d)(7) ** See Periodic Monitoring Summary	None	None
BH-2-4	EU	60D-2	PM (OPACITY)	40 CFR Part 60, Subpart D	§ 60.42(a)(2)	On/after the performance tests of §60.8, no affected facility shall emit gases exhibiting greater than 20% opacity except for one six-minute period per hour of not more than 27% opacity.	[G]§ 60.45(b)(6) § 60.45(b)(7) [G]§ 60.45(b)(7)(i) [G]§ 60.45(b)(7)(ii) § 60.45(b)(7)(iii) § 60.45(h) [G]§ 60.45(h)(1) [G]§ 60.45(h)(2) § 60.46(a) § 60.46(b)(3)	§ 60.45(h) [G]§ 60.45(h)(1) [G]§ 60.45(h)(2)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BH-2-4	EU	60D-2	SO <sub>2</sub>	40 CFR Part 60, Subpart D	§ 60.40(a)	The affected facility burns fuel (such as only gaseous fuels) that has no specific SO <sub>2</sub> emission requirements.	§ 60.45(b)(2) § 60.45(b)(4)	None	None
BH-2-4	EU	60D-2	NOx	40 CFR Part 60, Subpart D	§ 60.44(a)(1)	On/after the §60.8 tests, no affected facility shall emit gases containing NOx, expressed as NO2, in excess of 86 ng/J heat input (0.2 lb/MMBtu) derived from gaseous fossil fuel.	\$ 60.45(b)(3) \$ 60.45(b)(4) \$ 60.46(a) \$ 60.46(b)(1) [G]\$ 60.46(b)(5) [G]\$ 60.46(d)(1) \$ 60.46(d)(5) \$ 60.46(d)(6) \$ 60.46(d)(7) ** See Periodic Monitoring Summary	None	None
BH-2-4	EU	63DDDDD	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7505 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart DDDDD
BH-2-3	EP	ВН-2-3-Р	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BH-2-4	EP	ВН-2-4-Р	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

	Additional Mo	nitoring Requ	iirements	
Periodic Monitorii	ng Summary	••••••••••	••••••	25

<b>Unit/Group/Process</b>	s Information
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ID No.: BH-2-3

Control Device ID No.: N/A | Control Device Type: N/A

### **Applicable Regulatory Requirement**

Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: BH-2-3-P

Pollutant: OPACITY Main Standard: § 111.111(a)(1)(C)

#### **Monitoring Information**

**Indicator: Visible Emissions** 

Minimum Frequency: Once per week

Averaging Period: n/a

Deviation Limit: No visible emissions, or if using Test Method 9 opacity shall not

exceed 15%.

Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.

If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions.

If the result of the Test Method 9 is an opacity above the corresponding opacity limit, the permit holder shall report a deviation.

Unit/Group,	/Process	Inf	ormation
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ID No.: BH-2-4

Control Device ID No.: N/A | Control Device Type: N/A

#### Applicable Regulatory Requirement

Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: BH-2-4-P

Pollutant: OPACITY Main Standard: § 111.111(a)(1)(C)

#### **Monitoring Information**

**Indicator: Visible Emissions** 

Minimum Frequency: Once per week

Averaging Period: n/a

Deviation Limit: No visible emissions, or if using Test Method 9 opacity shall not

exceed 15%.

Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.

If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions.

If the result of the Test Method 9 is an opacity above the corresponding opacity limit, the permit holder shall report a deviation.

<b>Unit/Group</b>	/Process ]	Information
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ID No.: BH-2-4

Control Device ID No.: N/A | Control Device Type: N/A

#### **Applicable Regulatory Requirement**

Name: 40 CFR Part 60, Subpart D SOP Index No.: 60D-2

Pollutant: PM | Main Standard: § 60.42(a)(1)

#### **Monitoring Information**

**Indicator: Visible Emissions** 

Minimum Frequency: Once per week

Averaging Period: n/a

Deviation Limit: No visible emissions, or if using Test Method 9 opacity shall not

exceed 20%.

Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.

If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions.

If the result of the Test Method 9 is an opacity above the corresponding opacity limit, the permit holder shall report a deviation.

**Unit/Group/Process Information** 

ID No.: BH-2-4

Control Device ID No.: N/A Control Device Type: N/A

**Applicable Regulatory Requirement** 

Name: 40 CFR Part 60, Subpart D SOP Index No.: 60D-1

Pollutant: NO<sub>X</sub> Main Standard: § 60.44(a)(1)

**Monitoring Information** 

Indicator: NOx Concentration

Minimum Frequency: Four times per hour

Averaging Period: One hour

Deviation Limit: Maximum NOx concentration (expressed as NO2) = 0.20 lb/MMBtu

heat input.

Periodic Monitoring Text: Measure and record the concentration of nitrogen oxide in the exhaust stream with a continuous emission monitoring system (CEMS). In addition, monitor the oxygen or carbon dioxide content of the flue gas with a CEMS. The CEMS shall be operated in accordance with the monitoring requirements of 40 CFR § 60.13 and the performance specifications of 40 CFR Part 60, Appendix B.

**Unit/Group/Process Information** 

ID No.: BH-2-4

Control Device ID No.: N/A Control Device Type: N/A

**Applicable Regulatory Requirement** 

Name: 40 CFR Part 60, Subpart D SOP Index No.: 60D-2

Pollutant: NO<sub>X</sub> Main Standard: § 60.44(a)(1)

**Monitoring Information** 

Indicator: NOx Concentration

Minimum Frequency: Four times per hour

Averaging Period: One hour

Deviation Limit: Maximum NOx concentration (expressed as NO2) = 0.20 lb/MMBtu

heat input.

Periodic Monitoring Text: Measure and record the concentration of nitrogen oxide in the exhaust stream with a continuous emission monitoring system (CEMS). In addition, monitor the oxygen or carbon dioxide content of the flue gas with a CEMS. The CEMS shall be operated in accordance with the monitoring requirements of 40 CFR § 60.13 and the performance specifications of 40 CFR Part 60, Appendix B.

Permit Shield	
Permit Shield	31

### **Permit Shield**

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Gro	up/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
BH-2-3	N/A	40 CFR Part 60, Subpart D	This unit was constructed before 8/17/1971.
BH-2-4	N/A	40 CFR Part 60, Subpart Db	Unit was constructed before 6/19/84.
BH-2-4	N/A	40 CFR Part 60, Subpart Dc	Unit was constructed before 6/9/89.
LSHOP-DEGR	N/A	30 TAC Chapter 115, Degreasing Processes	Solvent has a true vapor pressure < 0.6 psia at 100 degrees Fahrenheit and the drain area is less than 16 inches squared; the degreasing waste solvent is disposed in enclosed containers.

New Source Review Authorization References	
New Source Review Authorization References	33
New Source Review Authorization References by Emission Unit	34

### **New Source Review Authorization References**

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits				
PSD Permit No.: PSDTX1320	Issuance Date: 12/20/2013			
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.				
Authorization No.: 20901	Issuance Date: 12/11/2007			
Authorization No.: 2165	Issuance Date: 12/20/2013			
Authorization No.: 82086	Issuance Date: 06/28/2007			
Permits By Rule (30 TAC Chapter 106	) for the Application Area			
Number: 106.227	Version No./Date: 09/04/2000			
Number: 106.263	Version No./Date: 11/01/2001			
Number: 106.433	Version No./Date: 09/04/2000			
Number: 106.452	Version No./Date: 09/04/2000			
Number: 106.454	Version No./Date: 11/01/2001			

## **New Source Review Authorization References by Emissions Unit**

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
BH-2-3	BOILER #3	2165, 82086, PSDTX1320
BH-2-3	BOILER #3 STACK	2165, 82086, PSDTX1320
BH-2-4	BOILER #4	2165, PSDTX1320
BH-2-4	BOILER #4 STACK	2165, PSDTX1320
LSHOP-DEGR	DEGREASER IN L SHOP	106.454/11/01/2001

	Appendix A
Acronym List .	3

# **Acronym List**

The following abbreviations or acronyms may be used in this permit:

ACEM	actual cubic feet per minute
	alternate means of control
	Acid Rain Program
	Acid Kalii Flogram
	Beaumont/Port Arthur (nonattainment area)
CD.	
CD	
COMS	continuous opacity monitoring system
CVD	closed-vent system Dallas/Fort Worth (nonattainment area)
	Designated Representative
	El Paso (nonattainment area)
EP	emission point
	U.S. Environmental Protection Agency
	emission unit
	Federal Clean Air Act Amendments
	federal operating permit
	grandfathered
	grains per 100 standard cubic feet
HAP	hazardous air pollutant
	Houston/Galveston/Brazoria (nonattainment area)
	hydrogen sulfide
	identification number
lb/hr	pound(s) per hour
	Million British thermal units per hour
	monitoring, recordkeeping, reporting, and testing
	nonattainment
,	not applicable
	National Allowance Data Base
NO <sub>x</sub>	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
	New Source Review
ORIS	Office of Regulatory Information Systems
	lead
PBR	Permit By Rule
PM	particulate matter
ppmv	parts per million by volume
PSD	prevention of significant deterioration
	Responsible Official
	sulfur dioxide
	Texas Commission on Environmental Quality
	total suspended particulate
	true vapor pressure
	United States Code
	volatile organic compound

Appendix B	
Major NSR Summary Table	38

Permit Number: 2165		PSDTX1320		Issuand	ce Date: <b>12/20/2013</b>		
Emission Point No. (1)	Source Name (2)	Air Contaminan	<b>Emission Rates</b> *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
		t Name (3)	lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
BH-2-3	Boiler No. 3	$NO_x(6)$	64.0	104.0	5, 14, 16, 17	8, 14, 16, 18, 19	14
	400 MMBtu/hr (5)	СО	150.0	129.65	3, 5, 14, 16, 17	3, 8, 14, 16, 18, 19	3, 14
		VOC	2.16	9.45	3, 5, 16, 17	3, 8, 16, 19	3
		PM <sub>10</sub>	2.98	13.05	5, 16, 17	7, 8, 16, 18, 19	
		$SO_2$	0.07	0.30	5, 16, 17	8, 16, 18, 19	
		$\mathrm{NH}_3$	0.28	0.01	5, 14, 16, 17	8, 14, 16, 18, 19	
		HCN	0.45	0.02	5, 16, 17	8, 16, 18, 19	
BH-2-4	Boiler No. 4	NO <sub>x</sub>	25.0	72.76	2, 5, 14, 16, 17	2, 8, 14, 16, 18, 19	2, 14
	623.6 MMMBtu/hr (5)	CO	110.0	224.94	2, 3, 5, 14, 16, 17	2, 3, 8, 14, 16, 18, 19	2, 3, 14
		VOC	3.36	14.73	2, 3, 5, 16, 17	2, 3, 8, 16, 18, 19	2, 3
		PM <sub>10</sub>	4.65	20.35	2, 5, 7, 16, 17	2, 7, 8, 16, 18, 19	2
		$SO_2$	0.11	0.47	2, 5, 16, 17	2, 8, 16, 18, 19	2
		$\mathrm{NH}_3$	3.61	15.27	2, 5, 14, 15, 16, 17	2, 8, 14, 15, 16, 18, 19	2, 15
		HCN	0.72	0.22	2, 5, 16, 17	2, 8, 16, 18, 19	2
BH-2-5	Boiler No. 5	NO <sub>x</sub>	5.15	27.07	2, 5, 13, 14, 16, 17	2, 8, 13, 14, 16, 18, 19	2, 13, 14
	515 MMBtu/hr	NO <sub>x</sub> (MSS)	72.08	-	2, 5, 13, 14, 16, 17	2, 8, 13, 14, 16, 18, 19	2, 13, 14
		СО	19.03	88.68	2, 3, 5, 13, 14, 16, 17	2, 3, 8, 13, 14, 16, 18,	2, 3, 13, 14

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Emission Point No. (1)	Source Name (2)	Air Contaminan	<b>Emission Rates *</b>		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
		t Name (3)	lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
		CO (MSS)	97.85	-	2, 3, 5, 13, 14, 16, 17	2, 3, 8, 13, 14, 16, 18,	2, 3, 13, 14
		VOC	2.83	12.40	2, 3, 5, 13, 16, 17	2, 3, 8, 13, 16, 18, 19	2, 3, 13
		PM	3.09	13.53	2, 5, 7, 13, 16, 17	2, 7, 8, 13, 16, 18, 19	2, 13
		PM <sub>10</sub>	3.09	13.53	2, 5, 7, 13, 16, 17	2, 7, 8, 13, 16, 18, 19	2, 13
		$PM_{2.5}$	3.09	13.53	2, 5, 7, 13, 16, 17	2, 7, 8, 13, 16, 18, 19	2, 13
		$SO_2$	7.35	2.08	2, 5, 13, 16, 17	2, 8, 13, 16, 18, 19	2, 13
		H <sub>2</sub> SO <sub>4</sub>	0.45	0.10	2, 5, 13, 16, 17	2, 8, 13, 16, 18, 19	2, 13
		$NH_3$	3.90	5.27	2, 5, 13, 14, 15, 16, 17	2, 8, 13, 14, 15, 16,	2, 13, 15
BH-2-6	Boiler No. 6	NO <sub>x</sub>	5.15	27.07	2, 5, 13, 14, 16, 17	2, 8, 13, 14, 16, 18, 19	2, 13, 14
	515 MMBtu/hr	NO <sub>x</sub> (MSS)	72.08	-	2, 5, 13, 14, 16, 17	2, 8, 13, 14, 16, 18, 19	2, 13, 14
		СО	19.03	88.68	2, 3, 5, 13, 14, 16, 17	2, 3, 8, 13, 14, 16, 18,	2, 3, 13, 14
		CO (MSS)	97.85	-	2, 3, 5, 13, 14, 16, 17	2, 3, 8, 13, 14, 16, 18,	2, 3, 13, 14
		VOC	2.83	12.40	2, 3, 5, 13, 16, 17	2, 3, 8, 13, 16, 18, 19	2, 3, 13
		PM	3.09	13.53	2, 5, 7, 13, 16, 17	2, 7, 8, 13, 16, 18, 19	2, 13
		PM <sub>10</sub>	3.09	13.53	2, 5, 7, 13, 16, 17	2, 7, 8, 13, 16, 18, 19	2, 13
		$PM_{2.5}$	3.09	13.53	2, 5, 7, 13, 16, 17	2, 7, 8, 13, 16, 18, 19	2, 13
		$SO_2$	7.35	2.08	2, 5, 13, 16, 17	2, 8, 13, 16, 18, 19	2, 13
		H <sub>2</sub> SO <sub>4</sub>	0.45	0.10	2, 5, 13, 16, 17	2, 8, 13, 16, 18, 19	2, 13
		$\mathrm{NH}_3$	3.90	5.27	2, 5, 13, 14, 15, 16, 17	2, 8, 13, 14, 15, 16,	2, 13, 15

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Emission Point No. (1)	Source Name (2)	Air Contaminan	Emission	Rates *	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
		t Name (3)	lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
BLR/FUG	Boiler Fugitives (7)	СО	0.08	0.37		18, 19	
		$NH_3$	0.01	0.01	11	18, 19	
		HCN	0.01	0.01		18, 19	
BLR-FUG2	Piping Fugitives (7)	СО	0.03	0.12		18, 19	
		VOC	0.70	3.07		18, 19	
		$NH_3$	0.10	0.44	11	18, 19	

#### Footnotes:

- (1) Emission point identification either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
  - NO<sub>x</sub> total oxides of nitrogen
  - SO<sub>2</sub> sulfur dioxide
  - PM total particulate matter, suspended in the atmosphere, including  $PM_{10}$  and  $PM_{2.5}$ , as represented
  - $PM_{10}$  total particulate matter equal to or less than 10 microns in diameter, including  $PM_{2.5}$ , as represented
  - CO carbon monoxide HCN - hydrogen cyanide
  - NH<sub>3</sub> ammonia
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) The pound per hour and ton per year emission rates for these facilities include emissions from MSS.
- (6) The NOx emission rates, as authorized by Standard Permit Number 82086, is incorporated by reference only.
- (7) Emission rate is an estimate and is enforceable through compliance with the applicable special condistion(s) and permit application representation.

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1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates (MAERT)," and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in this permit.

(3/05)

# **Federal Applicability**

- 2. The boilers authorized by this permit shall comply with applicable requirements of the Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources, Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):
  - A. Subpart A: General Provisions
  - B. Subpart D: Standards of Performance for Fossil-fueled Fired Steam Generators for which Construction Commenced after August 17, 1971. (Boiler No. 4) (12/08)
  - C. Subpart Db: Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. (Boiler Nos. 5 & 6) (12/13)
- 3. The boilers authorized by this permit shall comply with applicable requirements of the EPA regulations on National Emission Standards for Hazardous Air Pollutants (HAPs) for Source Categories, 40 CFR Part 63: (12/13)
  - A. Subpart A: General Provisions.
  - B. Subpart DDDDD: National Emission Standards for HAPs for Industry, Commercial, and Institutional Boilers and Process Heaters

## **Emission Standards/Operating Limitations/Fuel Specifications**

- 4. Fuel for the boilers [Emission Point Numbers (EPNs): BH-2-3, BH-2-4, BH-2-5, and BH-2-6) shall be limited to: **(12/13)** 
  - A. Pipeline-quality natural gas containing no more than 0.25 grain of hydrogen sulfide and 5 grains of total sulfur per 100 dry standard cubic feet;

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- B. N-Area off-gas (off-gas) containing hydrogen cyanide or ammonia (NH<sub>3</sub>) at or below the maximum concentrations given on Table 6 of the confidential file dated June 28, 2004; or
- C. Any combination of the above fuels.
- 5. The boiler firing rates in million British thermal units per hour (MMBtu/hr) determined by the total fuel flow at the higher heating value of the fuel shall not exceed the following:
  - A. Boiler No. 3 (EPN: BH-2-3) shall not exceed 400 MMBtu/hr. (3/05)
  - B. Boiler No. 4 (EPN: BH-2-4) shall not exceed 623.6 MMBtu/hr. (12/08)
  - C. Boiler Nos. 5 and 6 (EPNs: BH-2-5 and BH-2-6) each shall not exceed 515 MMBtu/hr. (12/13)
- 6. The boilers shall not exceed the following emission limits: (12/13)

EPN	Pollutant	Standard	Averaging Time
BH-2-3	$NO_x$	o.o6 lb/MMBtu	annual
DII o 4	$NO_x$	0.027 lb/MMBtu	annual
BH-2-4	$\mathrm{NH}_3$	10 ppm¹	aiiiiuai
DII o =0	$NO_x$	o.o1 lb/MMBtu	
BH-2-5 <sup>2</sup> BH-2-6 <sup>2</sup>	CO	50 ppm¹	One hour average
	$\mathrm{NH}_3$	10 ppm <sup>1</sup>	

<sup>1</sup>The ppm shall be reported on dry volume basis when corrected to 3% oxygen (O<sub>2</sub>) <sup>2</sup>The emission limits do not apply during hot standby mode, maintenance, startup, and shutdown (MSS)

- 7. The opacity of emissions from the Boiler Stacks Nos. 3, 4, 5, and 6 shall not exceed 5 percent averaged over a six-minute period, except for those periods described in Title 30 Texas Administrative Code § 111.111(a)(1)(E). The opacity of emission shall not exceed 15 percent during MSS operations. The permit holder shall demonstrate compliance with this Special Condition in accordance with the following procedures: (12/13)
  - A. Visible emission observations shall be conducted and recorded at least once during each calendar quarter while the facilities are in operation, unless the emission unit is not operating for the entire calendar quarter.

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- B. This determination shall be made by first observing for visible emissions while each facility is in operation. Observations shall be made at least 15 feet and no more than 0.25 miles from the emission point(s). Up to three emissions points may be read concurrently, provided that all three emissions points are within a 70 degree viewing sector or angle in front of the observer such that the proper sun position (at the observer's back) can be maintained for all three emission points. A certified opacity reader is not required for these visible emission observations.
- C. If visible emissions are observed from an emission point, then the opacity shall be determined and documented within 24 hours for that emission point using 40 CFR Part 60, Appendix A, Reference Method 9.
- D. If the opacity limitations of this Special Condition are exceeded, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of the observations.

### Maintenance, Startup and Shutdown

- 8. This permit authorizes MSS activities which comply with the emission limits in the MAERT. (12/08)
  - A. Facility and air pollution control equipment will be operated in a manner consistent with good practices for minimizing emissions;
  - B. Applicable emission monitoring equipment will be kept in operation;
  - C. Only pipeline quality natural gas is authorized for use during start-up and shutdown. During MSS activities no N-area off gas shall be sent to the boilers.
  - D. Startup and shutdown periods for Boiler No. 3 (EPN: BH-2-3) shall not exceed 126 hours per year.
  - E. Startup and shutdown periods for Boiler No. 4 (EPN: BH-2-4) shall not exceed 135 hours per year.
  - F. Startup and shutdown periods for Boiler Nos. 5 and 6 (EPN: BH-2-5 and BH-2-6) shall not exceed the following: **(12/13)** 
    - (1) a startup shall not exceed 24 hours per boiler,
    - (2) a shutdown shall not exceed 3 hours per boiler, and

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- (3) combined the boilers are limited to 270 hours of startup and shutdown operation per year.
- G. Hot Standby Mode (HSM) for EPNs: BH-2-5 and BH-2-6 is defined as an operational load not to exceed 18 MMBtu/hr. The emissions from HSM operations shall not exceed the normal hourly emission rates in the MAERT.
- 9. The following activities are associated with MSS. (12/08)
  - A. Boiler startup and shutdown.
  - B. Maintenance activities are identified as follows:
    - (1) Replacement of analyzers, process filters, screens, steam burners, burner rings, and other combustion equipment.
    - (2) Calibration of all analytical instruments, including continuous emissions monitoring system (CEMS).
    - (3) Calibration and maintenance of process instrumentations.
    - (4) Insulation and refractory handling.
    - (5) Maintenance on the boiler tubes, steam drum, burner rings, RVs, refractory, and instrumentation.
    - (6) Boiler Nos. 4, 5, and 6 maintenance on pollution reduction systems, such as economizer,  $NH_3$  feed lines. (12/13)
    - (7) Maintenance on raw material feed systems.
    - (8) Combustion tuning. (12/13)

# Anhydrous Ammonia (NH<sub>3</sub>) (12/13)

- 10. The permit holder shall maintain prevention and protection measures for the  $NH_3$  storage system. The  $NH_3$  storage tank area will be marked and protected so as to protect the  $NH_3$  storage area from accidents that could cause a rupture.
- 11. In addition to the requirements of Special Condition No. 10, the permit holder shall maintain the piping and valves in  $NH_3$  service as follows:
  - A. All operating practices and procedures relating to the handling and storage of NH<sub>3</sub> shall conform to the safety recommendations specified for that

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- compound by guidelines of the American National Standards Institute and the Compressed Gas Association.
- B. Audio, visual, and olfactory (AVO) checks for NH<sub>3</sub> leaks shall be made once a day.
- C. Immediately, but no later than 24 hours upon detection of a leak, following the detection of a leak, plant personnel shall take one or more of the following actions:
  - (1) Locate and isolate the leak, if necessary.
  - (2) Commence repair or replacement of the leaking component.
  - (3) Use a leak collection or containment system to control the leak until repair or replacement can be made if immediate repair is not possible.

### Initial Demonstration of Compliance (12/13)

- 12. Sampling ports and platforms shall be incorporated into the design of all exhaust stacks according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the Texas Commission on Environmental Quality (TCEQ) Regional Director.
- 13. The holder of this permit shall perform stack sampling and other testing as required to establish the actual quantities of air contaminants being emitted into the atmosphere from EPNs: BH-2-5 and BH-2-6 to determine initial compliance with all emission limits established in this permit. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the appropriate EPA Reference Methods to be determined during the pretest meeting.
  - A. The TCEQ Houston Regional Office and local air pollution control agencies having jurisdiction shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting. The notice shall include:
    - (1) the date for pretest meeting;
    - (2) the date sampling will occur;
    - (3) the name of firm conducting sampling;
    - (4) the type of sampling equipment to be used; and
    - (5) the method or procedure to be used in sampling.
  - B. A written proposed description of any deviation from sampling procedures specified in permit conditions or the TCEQ or EPA sampling procedures shall

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be made available to the TCEQ prior to the pretest meeting. The appropriate TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures.

- C. Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate or equivalent procedure proposals for testing under 40 CFR Part 60, Standards of Performance for New Stationary Sources, which must have the EPA approval shall be submitted to the TCEQ Office of Air, Air Permits Division in Austin.
- D. Air contaminants emitted from boilers (EPNs: BH-2-5 and BH-2-6) to be tested at maximum heat input include, but are not limited to,  $NO_x$ , CO, volatile organic compounds (VOC), particulate matter 10 microns or less in diameter, particulate matter 2.5 microns or less in diameter, and  $NH_3$ , if applicable. If off- gas will be used, the boiler must fire the maximum percentage of the non-natural gas part of the off-gas intended during normal operation for this test. Future increases in the percentage of off-gas fired in the boiler or significant changes in off-gas composition may require approval of the appropriate TCEQ Regional Director and could include retesting under this condition.
- E. Sampling shall occur within 90 days after installation or modification of the boiler. Requests for additional time to perform sampling shall be submitted to the appropriate TCEQ Regional Office. Additional time to comply with the applicable requirements of 40 CFR Part 60 requires EPA approval, and requests shall be submitted to the TCEQ Office of Air, Air Permits Division in Austin.

# **Continuous Determination of Compliance**

- 14. The holder of this permit shall install, calibrate, maintain, and operate a CEMS on Boiler Nos. 3, 4, 5, and 6 to measure and record the concentrations of  $NO_x$ , CO, and diluent gases ( $O_2$  or carbon dioxide) from the boiler's exhaust. (12/13)
  - A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B, or an acceptable alternative. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Air, Air Permits Division in Austin for requirements to be met.

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B. The holder of this permit shall assure that the CEMS meets the applicable quality assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1, or an acceptable alternative. Relative accuracy exceedances, as specified in 40 CFR Part 60, Appendix F, § 5.2.3 and any CEMS downtime shall be reported to the appropriate TCEQ Regional Director, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.

Quality-assurance of the NH<sub>3</sub> CEMS, if installed, shall be accomplished by Phenol Nitroprusside Method or the Indophenol Method on a quarterly basis. Results shall be recorded and calculations made to correlate test results to allowable emission rates.

- C. The monitoring data shall be reduced to hourly average concentrations at least once everyday, using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of the permit allowable emission rates in lb/hr at least once everyday. Pound per hour data shall be summed on a monthly basis to tons per year and used to determine compliance with the annual emissions limits of this permit. If the CEMS malfunctions, then the recorded concentrations may be reduced to units of the permit allowable as soon as practicable after the CEMS resumes normal operation.
- D. All monitoring data and quality-assurance data shall be maintained by the source for a period of two years and shall be made available to the TCEQ Executive Director or designated representative upon request. The data from the CEMS may be used to determine compliance with the conditions of this permit.
- E. The TCEQ Houston Regional Office shall be notified at least 30 days prior to any required relative accuracy test audits in order to provide them the opportunity to observe the testing.
- 15. The  $NH_3$  concentration in the Boiler Nos. 4, 5, and 6 exhausts shall be tested or calculated according to one of the methods listed below and shall be tested or calculated according to frequency listed below. Testing for  $NH_3$  slip is only required on days when the Selective Catalytic Reduction system (SCR) is in operation. (12/13)
  - A. The holder of this permit shall install, calibrate, maintain, and operate a CEMS to measure and record the concentrations of NH<sub>3</sub>. The NH<sub>3</sub> concentrations shall be corrected and recorded in accordance with Special Condition No. 6.

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- B. As an approved alternative, the NH<sub>3</sub> slip may be measured using a sorbent or stain tube device specific for NH<sub>3</sub> measurement in the 5 to 10 parts per million ranges. The frequency of sorbent or stain tube testing shall be daily for the first 60 days of operation, after which, the frequency may be reduced to weekly testing if operating procedures have been developed to prevent excess amounts of NH<sub>3</sub> from being introduced in the SCR unit and when operation of the SCR unit has been proven successful with regard to controlling NH<sub>3</sub> slip. Daily sorbent or stain tube testing shall resume when the catalyst is within 30 days of its useful life expectancy. These results shall be recorded and used to determine compliance with Special Condition No. 6.
- C. As an approved alternative to sorbent or stain tube testing or an NH<sub>3</sub> CEMS, the permit holder may install and operate a second NO<sub>x</sub> CEMS probe located between the boiler and the SCR, upstream of the stack NO<sub>x</sub> CEMS, which may be used in association with the SCR efficiency and NH<sub>3</sub> injection rate to estimate NH<sub>3</sub> slip. This condition shall not be construed to set a minimum NO<sub>x</sub> reduction efficiency on the SCR unit. These results shall be recorded and used to determine compliance with Special Condition No. 6.
- D. Any other method used for measuring NH<sub>3</sub> slip shall require prior approval from the TCEQ Regional Director.
- 16. The holder of this permit shall additionally calibrate, maintain, and operate continuous monitoring systems on Boiler Nos. 3, 4, 5, and 6 to monitor and record the average hourly natural gas and N-area off-gas consumption of the boilers. The systems shall be accurate to  $\pm$  5.0 percent of the unit's maximum flow. (12/13)
- 17. If any emission monitor fails to meet specified performance, it shall be repaired or replaced immediately, but no later than 7 days after it was first detected by any employee at the facility, unless written permission is obtained from the TCEQ which allows for a longer repair/replacement time. The holder of this permit shall develop an operation and maintenance program (including stocking necessary spare parts) to ensure that the continuous monitors are available as required. (03/05)

# Recordkeeping

- 18. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made available at the request of personnel from the TCEQ, EPA, or any air pollution control agency with jurisdiction:
  - A. A copy of this permit.

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- B. A complete copy of the testing reports and records of the initial performance testing completed pursuant to Special Condition No. 13 to demonstrate initial compliance. (12/13)
- C. Stack sampling results or other air emissions testing (other than CEMS data) that may be conducted on units authorized under this permit after the date of issuance of this permit.
- 19. The following information shall be maintained by the holder of this permit in a form suitable for inspection for a period of five years after collection and shall be made available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction:
  - A. The CEMS data of NO<sub>x</sub>, CO, and O<sub>2</sub> emissions from EPNs: BH-2-3, BH-2-4, BH-2-5, and BH-2-6 to demonstrate compliance with the emission rates listed in the MAERT and Special Condition No. 6. (12/13)
  - B. Raw data files of all CEMS data including calibration checks, adjustments, and maintenance performed on these systems in a permanent form suitable for inspection. (12/13)
  - C. Records of visible emissions, opacity observations, and any corrective action taken to demonstrate compliance with Special Condition No. 7. (12/13)
  - D. Records of dates and times for startups and shutdowns of the boilers to demonstrate compliance with Special Condition No. 8. (12/13)
  - E. Records maintenance activities to demonstrate compliance with Special Condition No. 9. (12/13)
  - F. Records of AVO checks, maintenance performed to any piping and valves in  $NH_3$  service as required by Special Condition No. 11. (12/13)
  - G. Records of accidental releases, spills, or venting of  $NH_3$  and the corrective action taken. (12/13)
  - H. The holder of the permit will maintain records of downtime of the CEMS required by Special Condition No. 14. Once every six months, the permit holder will calculate total CEMS downtime as a percentage of unit operating time for each boiler. Any six month period during which CEMS downtime exceeds 5 percent of total unit operating time will be identified as a deviation on the next Title V semi-annual deviation report. (12/08)
  - I. Records of  $NH_3$  monitoring pursuant to Special Condition No. 15. (12/13)

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J. Records of the amount of the average hourly natural gas and N-area off-gas consumption of the boilers per Special Condition No. 16. (12/13)

Date: <u>December 20, 2013</u>

#### Emission Sources - Maximum Allowable Emission Rates

### Permit Numbers 2165 and PSDTX1320

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

#### Air Contaminants Data

Emission Point No.	Source Name (2)	Air Contaminant	Emission Rates		
(1)	Source Name (2)	Name (3)	lb/hour	TPY (4)	
BH-2-3	Boiler No. 3 400 MMBtu/hr (5)	NO <sub>x</sub> (6)	64.00	104.00	
	400 111125ta/ III (J)	СО	150.00	129.65	
		VOC	2.16	9.45	
		PM <sub>10</sub>	2.98	13.05	
		$SO_2$	0.07	0.30	
		$NH_3$	0.28	0.01	
		HCN	0.45	0.02	
BH-2-4 Boiler No. 4 623.6 MMBtu/hr (		NO <sub>x</sub>	25.00	72.76	
	0_010 1111200/111 (0)	СО	110.00	224.94	
		VOC	3.36	14.73	
		$PM_{10}$	4.65	20.35	
		$SO_2$	0.11	0.47	
		$NH_3$	3.61	15.27	
		HCN	0.72	0.22	

Project Numbers: 183998 and 184035

# Emission Sources - Maximum Allowable Emission Rates

Emission Point No.	Source Name (2)	Air Contaminant	<b>Emission Rates</b>		
(1)		Name (3)	lb/hour	TPY (4)	
BH-2-5	Boiler No. 5 515 MMBtu/hr	NO <sub>x</sub>	5.15	27.07	
		NO <sub>x</sub> (MSS)	72.08	-	
		СО	19.03	88.68	
		CO (MSS)	97.85	-	
		VOC	2.83	12.40	
		PM	3.09	13.53	
		$PM_{10}$	3.09	13.53	
		$PM_{2.5}$	3.09	13.53	
		SO <sub>2</sub>	7.35	2.08	
		H <sub>2</sub> SO <sub>4</sub>	0.45	0.10	
		$\mathrm{NH}_3$	3.90	5.27	
BH-2-6	Boiler No. 6 515 MMBtu/hr	$NO_x$	5.15	27.07	
		NO <sub>x</sub> (MSS)	72.08	-	
		СО	19.03	88.68	
		CO (MSS)	97.85	-	
		VOC	2.83	12.40	
		PM	3.09	13.53	
		$PM_{10}$	3.09	13.53	
		$PM_{2.5}$	3.09	13.53	
		SO <sub>2</sub>	7.35	2.08	
		H <sub>2</sub> SO <sub>4</sub>	0.45	0.10	
		$\mathrm{NH}_3$	3.90	5.27	

Project Numbers: 183998 and 184035

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#### Emission Sources - Maximum Allowable Emission Rates

Emission Point No.	Source Name (2)	Air Contaminant	<b>Emission Rates</b>	
(1)	Source Name (2)	Name (3)	lb/hour	TPY (4)
BLR/FUG	Boiler Fugitives (7)	СО	0.08	0.37
		$\mathrm{NH}_3$	0.01	0.01
		HCN	0.01	0.01
BLR-FUG2	Piping Fugitives (7)	СО	0.03	0.12
		VOC	0.70	3.07
			0.10	0.44

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources, use area name or fugitive source name.

(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO<sub>x</sub> - total oxides of nitrogen

SO<sub>2</sub> - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including  $PM_{10}$  and  $PM_{2.5}$ , as

represented

 $PM_{10}$  - total particulate matter equal to or less than 10 microns in diameter, including  $PM_{2.5}$ , as

represented

PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide HCN - hydrogen cyanide

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

(5) The pound per hour and ton per year emission rates for these facilities include emissions from MSS.

(6) The NO<sub>x</sub> emission rates, as authorized by Standard Permit Number 82086, is incorporated by reference only.

(7) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date:	December 20, 2013	